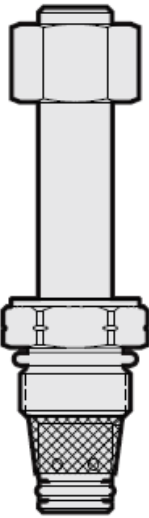




Overview



Description

A solenoid-operated, 2 port, normally closed, direct-acting, poppet-type, screw in hydraulic cartridge valve, designed for low-leakage blocking and load-holding applications to operate as a bidirectional blocking valve in low flow circuits.

Operation

When de-energized, the SF08-28 blocks flow in both directions. When energized, the poppet shifts to open the bidirectional flow path.

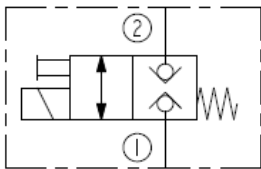
Manual Override Operation

Emergency use only! Not for continuous duty operation. To activate the "T" manual override: turn the knurled adjustment knob clockwise until the valve opens. To deactivate: turn the adjustment knob counterclockwise until it stops. To activate the "P" and "K" manual override: push until the valve opens. To deactivate: remove the applied force from the manual override.

Features

- Flow rating 11.3 lpm (3 gpm), peak flow up to 39 lpm (10.4 gpm)
- Pushbutton (P), Knob (K), and Threaded (T) manual override options
- Tested to 2 million cycles
- Less than 5 drops/min leakage maintained after endurance test

Symbol



Ratings

Pressure Ratings

Pressure rating	345 bar (5000 psi)
Proof pressure	690 bar (10,000 psi)
Burst pressure	1379 bar (20,000 psi)

Flow Ratings

Flow rating	11.3 lpm (3 gpm)	- Note: See performance graph for shifting limits.
Maximum internal leakage	5 drops/min	- Note: At 345 bar (5000 psi)

Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- Note: Buna N Seals
	-26 to 204 °C (-15 to 400 °F)	- Note: Fluorocarbon Seals
	-54 to 107 °C (-54 to 225 °F)	- Note: Polyurethane Seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

Operating Parameters

Fluids

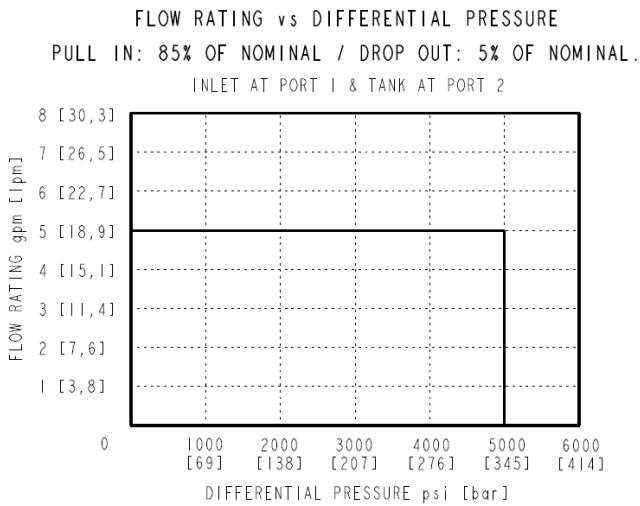
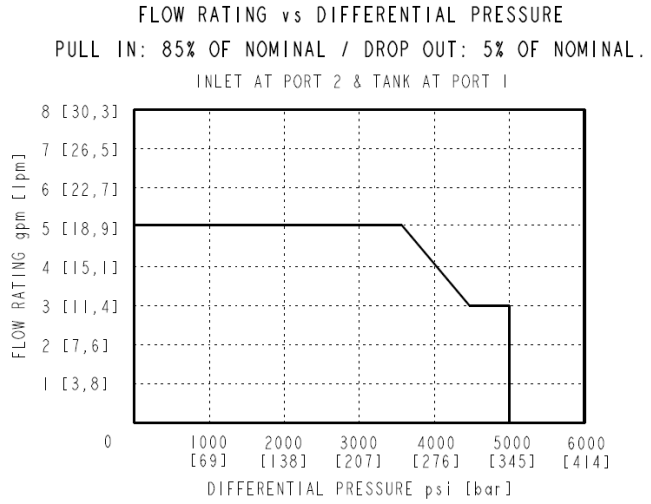
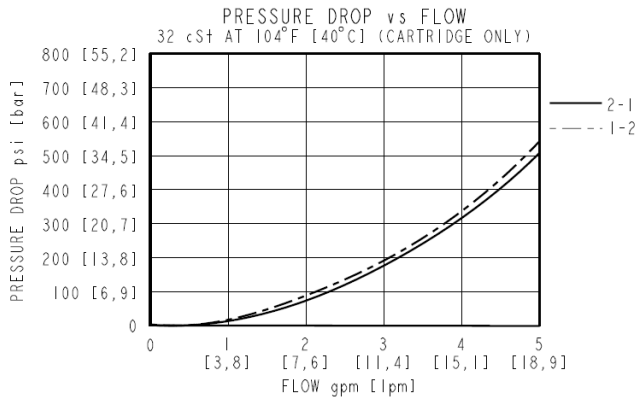
Compatible fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406



Properties

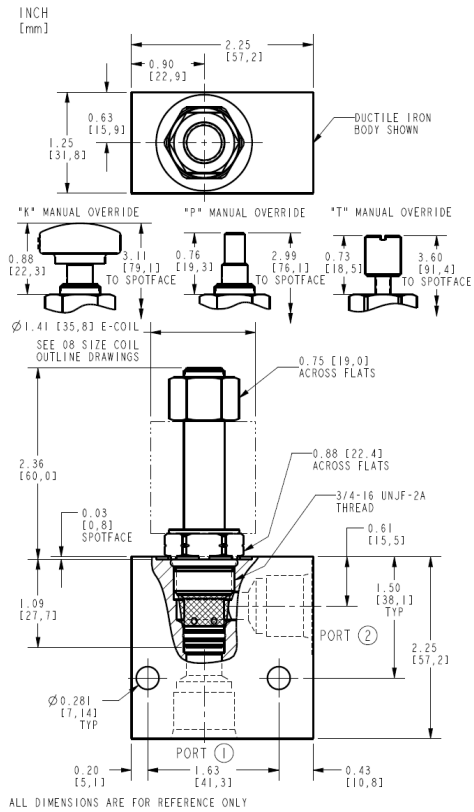
Corrosion protection	12 hr salt spray per ASTM B 633
Unit weight	0.18 kg (0.39 lb)
Internal wetted surface area	85 cm ² (18.6 in ²)

Performance





Dimensions



Installation Specifications

Cavity	VC08-2
Cartridge installation torque	25.8 to 28.6 N-m (19 to 21 ft-lb)
Coil nut torque	5.4 to 6.8 N-m (4 to 5 ft-lb)
Orientation restrictions	None

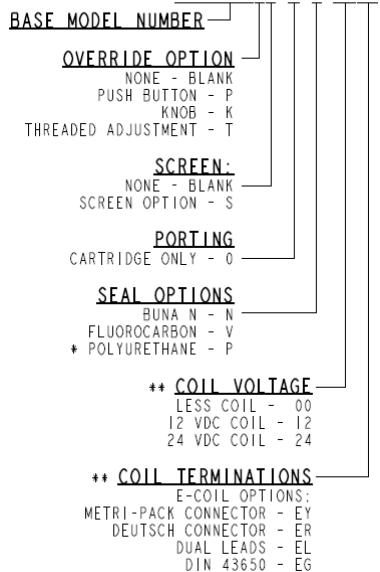
Accessories

Seal kit	SK08-2X-M (X = Seal option)
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Order Code

**ORDERING INFORMATION**

SF08-28XX-X-X-XXXX



* POLYURETHANE SEALS RECOMMENDED FOR OPERATING PRESSURES ABOVE 3500 psi [241 bar]

** CONSULT FACTORY OR CATALOG FOR OTHER AVAILABLE OPTIONS

Model Options**SF08-28EG-H-J-L****E Manual Override**

CODE	DESCRIPTION
BLANK	NONE
P	Push button
K	Knob
T	Threaded adjustment

G Screen

CODE	DESCRIPTION
BLANK	NONE
S	Screen

H Line Body

CODE	DESCRIPTION
0	No Body
4T	Aluminum SAE 4
6T	Aluminum SAE 6
8T	Aluminum SAE 8
6TD	Ductile Iron SAE 6
8TD	Ductile Iron SAE 8
2B	Aluminum BSPP 1/4" (2)
3B	Aluminum BSPP 3/8" (3)
3BD	Ductile Iron BSPP 3/8" (3)

J Seal



CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane

L Coil

CODE	DESCRIPTION
00	No Coil
10DL	10 VDC, D-Coil, Dual Lead Wires
10DR/D	10 VDC, D-Coil, Deutsch with Diode
10DS	10 VDC, D-Coil, Dual Spade
10EL	10 VDC, E-Coil, Dual Lead Wires, 18 inches long
10EL/36	10 VDC, E-Coil, Dual Lead Wires, 36 inches long
10ER	10 VDC, E-Coil, Deutsch
10ER/Z	10 VDC, E-Coil, Deutsch with Zener Diode
12DG	12 VDC, D-Coil, DIN 43650
12DL	12 VDC, D-Coil, Dual Lead Wires, 18 inches long
12DL/36	12 VDC, D-Coil, Dual Lead Wires, 36 inches long
12DL/W	12 VDC, D-Coil, Dual Lead Wires with Weatherpak
12DL/W/D	12 VDC, D-Coil, Dual Lead Wires with Weatherpak with Diode
12DR	12 VDC, D-Coil, Deutsch
12DR/D	12 VDC, D-Coil, Deutsch with Diode
12DR/Z	12 VDC, D-Coil, Deutsch with Zener Diode
12DS	12 VDC, D-Coil, Dual Spade
12EG	12 VDC, E-Coil, DIN 43650
12EG/Z	12 VDC, E-Coil, DIN 43650 with Zener Diode
12EJ	12 VDC, E-Coil, AMP Jr.
12EJ/Z	12 VDC, E-Coil, AMP Jr. with Zener Diode
12EL	12 VDC, E-Coil, Dual Lead Wires, 18 inches long
12EL/36	12 VDC, E-Coil, Dual Lead Wires, 36 inches long
12EL/Z	12 VDC, E-Coil, Dual Lead Wires with Zener Diode
12ER	12 VDC, E-Coil, Deutsch
12ER/Z	12 VDC, E-Coil, Deutsch with Zener Diode
12EY	12 VDC, E-Coil, Metri-Pack 150
12EY/Z	12 VDC, E-Coil, Metri-Pack 150 with Zener Diode
20DG	20 VDC, D-Coil, DIN 43650
20DS	20 VDC, D-Coil, Dual Spade
20ER	20 VDC, E-Coil, Deutsch
20ER/Z	20 VDC, E-Coil, Deutsch with Zener Diode
24AG	24 VDC, D-Coil, DIN 43650
24AP	24 VDC, D-Coil, 1/2" Conduit and Dual Lead Wires
24DG	24 VDC, D-Coil, DIN 43650
24DL	24 VDC, D-Coil, Dual Lead Wires, 18 inches long
24DL/36	24 VDC, D-Coil, Dual Lead Wires, 36 inches long
24DL/W	24 VDC, D-Coil, Dual Lead Wires with Weatherpak



CODE	DESCRIPTION
24DR	24 VDC, D-Coil, Deutsch
24DR/D	24 VDC, D-Coil, Deutsch with Diode
24DR/Z	24 VDC, D-Coil, Deutsch with Zener Diode
24DS	24 VDC, D-Coil, Dual Spade
24EG	24 VDC, E-Coil, DIN 43650
24EG/Z	24 VDC, E-Coil, DIN 43650 with Zener Diode
24EJ	24 VDC, E-Coil, AMP Jr.
24EL/D	24 VDC, E-Coil, Dual Lead Wires with Diode
24ER	24 VDC, E-Coil, Deutsch
24ER/Z	24 VDC, E-Coil, Deutsch with Zener Diode
24EY	24 VDC, E-Coil, Metri-Pack 150
24EY/Z	24 VDC, E-Coil, Metri-Pack 150 with Zener Diode
36DG	36 VDC, D-Coil, DIN 43650
36DS	36 VDC, D-Coil, Dual Spade
115AG	115 VAC, D-Coil, DIN 43650
115AP	115 VAC, D-Coil, 1/2" Conduit and Dual Lead Wires
230AG	230 VAC, D-Coil, DIN 43650
230AP	230 VAC, D-Coil, 1/2" Conduit and Dual Lead Wires